Implementation Plan

Gathering and Processing Sector

Company Information

Partner Address Label Here

If the information provided above is incorrect, please make corrections below.

Company Name: _____

Gas Star Contact: _____

Position: _____

Address: _____

_____

City, State, Zip Code: _____

Telephone: _____

Fax: _____

Email: _____

Implementation Plan Elements

ELEMENT 1 Best Management Practices (BMPs)

The following BMPs have been identified as significant opportunities to cost effectively reduce methane emissions from the processing sector. They were selected based on their applicability to the industry, economic feasibility, and cost-effectiveness. There are 3 core BMPs for the processing sector:

- **BMP 1** Replace gas pneumatics with instrument air systems
- **BMP 2** Install flash tank separators on glycol dehydrators
- **BMP 3** Implement directed inspection and maintenance (DI&M) at gas plants and booster stations

For detailed information on these BMPs, please refer to the Lessons Learned publications on the Natural Gas STAR Web site: *<www.epa.gov/gasstar/lessons.htm>*.

ELEMENT 2 Partner Reported Opportunities (PROs)

Current partners have reported many processes and technologies that are considered "other Best Management Practices" by the program. New partners are encouraged to evaluate and report current and new practices or technologies that cost effectively reduce methane emissions. PROs are made available to all partners, and can be viewed at: *<www.epa.gov/gasstar/pro/index.htm#table>.*

ELEMENT 3 Inventory Past Reductions

Partners are encouraged to report past methane emission reductions back to 1990. Accounting for these historical reductions will create a permanent record of your company's methane emission reduction efforts. More information is available in the Spring 1999 Natural Gas STAR Partner Update, which can be viewed at: *<www.epa.gov/gasstar/newsletters.htm>*.

The Implementation Plan is designed to be a dynamic tool for Natural Gas STAR Partners to plan their program activities. As company priorities and plans shift over time, the Implementation Plan may be revised or updated by submitting a new form to the program.

ELEMENT 1
Best Management Practices

BMP 1
Replace Gas Pneumatics with Instrument Air Systems

Pneumatic devices that use the pipeline gas pressure to transmit signals and drive process control valves collectively emit large amounts of methane into the atmosphere. Replacing these with instrument air systems eliminates emissions and improves safety.	Estimated Reduction Potential 15.8 bcf

Will you be implementing this BMP? ☐ Yes ☐ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Have already implemented
- ☐ Other _____ please describe:

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other _____

Please describe:

Activity Summary

Number of facilities currently equipped with instrument air systems? _____

Number of facilities suitable for conversion to instrument air? _____

Replacement Schedule

Number of planned instrument air projects:

Year 1: _____ Year 2: _____ Year 3: _____ Year 4: _____

Additional Information on Anticipated Plans and Projects

If additional space is needed, please continue on the back.

BMP 2
Install Flash Tank Separators on Glycol Dehydrators

Flash tank separators installed in glycol dehydration systems capture the methane entrained in the circulating glycol for use on site.	Estimated Reduction Potential 1.7 bcf

Will you be implementing this BMP? ☐ Yes ☐ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Have already implemented
- ☐ Other _____ please describe:

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other _____

Please describe:

Activity Summary

Number of glycol dehydrators currently equipped with flash tank separators? _____

Number of glycol dehydrators suitable for flash tank installation? _____

Replacement Schedule

Number of flash tank separators to be installed by the end of:

Year 1: _____ Year 2: _____ Year 3: _____ Year 4: _____

Additional Information on Anticipated Plans and Projects

If additional space is needed, please continue on the back.

BMP 3
Implement Directed Inspection and Maintenance at Gas Plants and Booster Stations

A DI&M program is a system for performing routine leak detection and repair where leak measurement data from previous inspections are used to guide subsequent inspections and to direct maintenance to those leaks that are cost effective to repair.	Estimated Reduction Potential 26.9 bcf

Will you be implementing this BMP? ☐ Yes ☐ No

If no, why?

- ☐ Not cost effective
- ☐ May consider at a later date
- ☐ Have already implemented
- ☐ Other _____ please describe:

If yes, at what scale will you be implementing this BMP?

- ☐ Company Wide
- ☐ Pilot Project
- ☐ Other _____

Please describe:

Activity Summary

Please fill out the table below to show the total number of gas plants and booster stations selected for BMP 3.

	Total number of facilities	Number selected for BMP 3
Number of Gas Plants		
Number of Booster Stations		

Inspection Schedule

Facilities will be inspected: ☐ quarterly ☐ annually ☐ biannually ☐ other _____

Please list in detail the number of gas plants and booster stations that will implement BMP 3 in upcoming years.

Year _____ Number of processing plants _____ Number of booster stations _____

Year _____ Number of processing plants _____ Number of booster stations _____

Year _____ Number of processing plants _____ Number of booster stations _____

Year _____ Number of processing plants _____ Number of booster stations _____

Additional Information on Anticipated Plans and Projects

If additional space is needed, please continue on the back.

ELEMENT 2
Partner Reported Opportunities

PROs

Your company may take advantage of additional technologies or practices to reduce methane emissions. These can be reported to Natural Gas STAR as PROs. Following is a list of some of the PROs that have been reported by other Gas STAR partners, which may be applicable to your operations (for more information on these PROs, please view: *<www.epa.gov/gasstar/pro/index.htm>* and *<www.epa.gov/gasstar/lessons.htm>*):

- ☆ Reducing glycol circulation rates in dehydrators
- ☆ Pipe glycol pump to vapor recovery unit
- ☆ Install electric starters
- ☆ Install electronic flare ignition devices
- ☆ Reducing emissions from compressor rod packing systems
- ☆ Replacing wet seals with dry in centrifugal compressors
- ☆ Convert engine starting to nitrogen

PROs you will be implementing	Please describe
PRO ______________________ At what scale will this PRO be implemented? ☐ Company Wide ☐ Pilot Project ☐ Other ______________________	
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ELEMENT 3
Inventory Past Reductions

An inventory of past reductions will help to create a permanent record of your past efforts.

As a first step, many new partners find it useful to inventory and document past methane emission reduction efforts. The inventory process helps companies quantify the success of their past activities and target future emission reduction efforts. Historical emission reductions identified as part of the inventory process can be reported to the Gas STAR Program.

Will you inventory past activities to include in your annual report? ☐ Yes ☐ No

If yes, please describe your company's plans for reviewing past emission reduction activities.

The Natural Gas STAR Program thanks you for your time.

Please send completed forms to:

Regular Mail
The Natural Gas STAR Program
U.S. EPA (6202J)
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Express/Overnight Mail
The Natural Gas STAR Program
U.S. EPA (6202J)
1310 L Street, NW
Washington, DC 20005

Questions? Please call Kevin Tingley: (202) 343-9086 or Fax (202) 343-2208